

**What is claimed is:**

1. An isolated DNA molecule comprising a DNA sequence selected from a group consisting of:

- 5 (i) a sequence of nucleotides as shown in Fig. 1;  
(ii) a sequence complementary to the sequence according to (i); and  
(iii) a sequence having up to 21% variation from the sequences according to (i) or (ii) which sequence is capable of hybridising thereto under standard hybridisation conditions which codes for a polypeptide of the SOX-9 type.

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2. An isolated DNA molecule comprising a DNA sequence selected from a group consisting of:

- (a) a sequence of nucleotides as shown in FIG. 8a;  
(b) a sequence complementary to the sequence according to (a); and  
15 (c) a sequence having up to 18% variation from the sequences according to (a) or (b) which sequence is capable of hybridising thereto under standard hybridisation conditions and which codes for a polypeptide of the SOX-9 type.

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3. A recombinant protein when encoded by a DNA sequence as defined in Claim 1.

4. A recombinant protein when encoded by a DNA sequence as defined in Claim 2.

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5. A recombinant protein comprising an amino acid sequence as shown in FIG. 1 as well as polypeptides of the SOX-9 type containing 93.5% - 100% identity to said sequence.

6. A recombinant protein comprising an amino acid sequence as shown in FIG. 8a as well as polypeptides containing 93.5% - 100% identity to said sequence.

8. A method of regeneration of bone or cartilage by administration of a DNA molecule as claimed in Claim 2.

10 10. A method of regeneration of bone or cartilage by administration of a recombinant  
protein claimed in Claim 4.

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